

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

- 5 1. A cooling tower support grid, comprising:
a lattice frame having a first series of bars which intersect a second series of bars to form a plurality of openings;
splash bar retaining clips integrally formed as part of
10 the lattice frame extending in opposed relation into each of the openings.
2. The cooling tower support grid as defined in Claim 1, wherein the first series of bars are in parallel spaced
15 relation and the second series of bars are in parallel spaced relation.
3. The cooling tower support grid as defined in Claim 1, wherein the clips have a lower retainer.
20
4. The cooling tower support grid as defined in Claim 3, wherein the lower retainer is a lip.
5. The cooling tower support grid as defined in Claim 1,
25 wherein the clips have a resilient finger.
6. The cooling tower support grid as defined in Claim 5, wherein the resilient finger is angled upwardly and terminates in a downwardly bent portion.
30
7. The cooling tower support grid as defined in Claim 1, wherein each of the clips extends from one of the first series of bars above and immediately adjacent to one of the second series of bars.
35
8. The cooling tower support grid as defined in Claim 1, wherein an upper peripheral edge of the lattice frame has an integrally formed hook whereby the lattice frame is suspended.

9. A cooling tower support grid, comprising:

a lattice frame having a first series of parallel bars which intersect a second series of parallel bars to form a plurality of openings;

splash bar retaining clips integrally formed as part of the lattice frame extending in opposed relation into each of the openings, each of the clips extending from one of the first series of bars above and immediately adjacent to one of the second series of bars, each of the clips having a lower retainer lip and a resilient finger which is angled upwardly and terminates in a downwardly bent portion.

10. The cooling tower support grid as defined in Claim 9, wherein an upper peripheral edge of the lattice frame has an integrally formed hook whereby the lattice frame is suspended.

11. The cooling tower support grid as defined in Claim 9, wherein a lower peripheral edge of the lattice frame has depending tabs with openings whereby the lattice frame is secured in position by extending fasteners through the openings.

12. The cooling tower support grid as defined in Claim 9, wherein the lattice frame is combined with a plurality of cooling tower splash bars, each of the splash bars comprising:

an elongate channel-form body having a first end, a second end, and a plurality of flow-through apertures;

the downwardly bent portion of the resilient finger engaging one of the plurality of flow-through apertures.

13. The cooling tower support grid as defined in Claim 12, wherein the body has a first longitudinal edge and a second longitudinal edge, both the first longitudinal edge and the second longitudinal edge having outwardly protruding engagement lips.

14. The cooling tower support grid as defined in Claim 13, wherein the engagement lips are positioned between opposed ones of the lower retainer lips and the one of the second series of bars immediately adjacent to the clips.

5

15. The cooling tower support grid as defined in Claim 12, wherein the body is a "C" channel.

16. The cooling tower support grid as defined in Claim 12, wherein the first end of each body has male members and the second end of each body has female members adapted to receive in mating relation the male members whereby several of the bodies can be joined in end to end relation.

17. The cooling tower support grid as defined in Claim 16, wherein each of the male members terminates in an engagement member and each of the female members terminates in a locking recess adapted to receive the engagement member, whereby each of the male members remain engaged with the female members until sufficient force is applied to cause the engagement member to be released from the locking recess.

18. The cooling tower support grid as defined in Claim 13, wherein several male members are positioned along the first longitudinal edge and several female receptacles are positioned along the second longitudinal edge, whereby a pair of bodies can be secured in face to face relation by inserting the male members of each of the pair of bodies into the female receptacles of the other of the pair of bodies.

30

19. The cooling tower support grid as defined in Claim 9, wherein the lattice frame is combined with a plurality of cooling tower splash bars, each of the splash bars comprising:
an elongate "C" channel body having a first end, a second end, a first longitudinal edge, a second longitudinal edge and a plurality of flow-through apertures, both the first longitudinal edge and the second longitudinal edge having

35

outwardly protruding engagement lips;

the engagement lips being positioned between opposed ones of the lower retainer lips and the one of the second series of bars immediately adjacent to the clips, with the downwardly bent portion of each of the resilient fingers engaging one of the plurality of flow-through apertures.

20. The cooling tower support grid as defined in Claim 9, wherein the lattice frame is combined with a plurality of cooling tower splash bars, each of the splash bars comprising:

an elongate "C" channel body having a first end, a second end, a first longitudinal edge, a second longitudinal edge and a plurality of flow-through apertures, several male members being positioned along the first longitudinal edge and several female members being positioned along the second longitudinal edge;

a pair of bodies secured in face to face relation by inserting the male members of each of the pair of bodies into the female receptacles of the other of the pair of bodies, the downwardly bent portion of each of the resilient fingers engaging one of the plurality of flow-through apertures to hold the pair of bodies in position.

21. The cooling tower support grid as defined in Claims 19 or 20, wherein the first end of each body has male members and the second end of each body has female members adapted to receive in mating relation the male members whereby several of the bodies can be joined in end to end relation.

22. The cooling tower support grid as defined in Claim 21, wherein each of the male members terminates in an engagement member and each of the female members terminates in a locking recess adapted to receive the engagement member, whereby each of the male members remain engaged with the female members until sufficient force is applied to cause the engagement member to be released from the locking recess.

23. The cooling tower support grid as defined in Claim 16, wherein the body has a first longitudinal edge and a second longitudinal edge and there are three male members: a first male member protruding from the first longitudinal edge, a
5 second male member protruding from the second longitudinal edge and a third male member positioned intermediate the first male member and the second male member.

24. The cooling tower support grid as defined in Claim 23,
10 wherein each of the male members terminates in an engagement member and each of the female members terminates in a locking recess adapted to receive the engagement member, whereby each of the male members remain engaged with the female members until sufficient force is applied to cause the engagement
15 member to be released from the locking recess.

25. A cooling tower splash bar, comprising:

an elongate channel-form body having a first end, a second end, a first longitudinal edge, a second longitudinal edge and

5 a plurality of flow-through apertures;

both the first longitudinal edge and the second longitudinal edge having outwardly protruding engagement lips.

26. A cooling tower splash bar, comprising:

an elongate channel-form body having a first end, a second end, a first longitudinal edge, a second longitudinal edge and a plurality of flow-through apertures;

5 the first end of each body has male members and the second end of each body has female members adapted to receive in mating relation the male members whereby several of the bodies can be joined in end to end relation.

10 27. The cooling tower splash bar as defined in Claim 26, wherein each of the male members terminates in an engagement member and each of the female members terminates in a locking recess adapted to receive the engagement member, whereby each of the male members remain engaged with the female members
15 until sufficient force is applied to cause the engagement member to be released from the locking recess.

28. The cooling tower splash bar as defined in Claim 27, wherein there are three male members: a first male member
20 protruding from the first longitudinal edge, a second male member protruding from the second longitudinal edge and a third male member positioned intermediate the first male member and the second male member.

29. A cooling tower splash bar, comprising:

an elongate channel-form body having a first end, a second end, a first longitudinal edge, a second longitudinal edge and
5 a plurality of flow-through apertures; and

several male members being positioned along the first longitudinal edge and several female receptacles being positioned along the second longitudinal edge, whereby a pair of bodies can be secured in face to face relation by inserting
10 the male members of each of the pair of bodies into the female receptacle of the other of the pair of bodies.